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KRAKOW MEETING SUCCESS



Over 90 delegates attended the 21st annual PI meeting in July, in the ancient Polish city of Krakow.

The meeting took place over five days and included closed sessions for Regional PI Association (RPA) Chairmen and representatives (28 attended) plus technical sessions devoted to PI Competence Centers, Training Centers and Test Labs.

As well as technology updates, the RPA Chairmen sessions included workshops on the **NEW PI WEB SITE**, with the aim of improving things further now that the site has gone live.

PI Chairman Jörg Freitag commented on the scale and breadth of the PI community in his opening address. "It's one of the main reasons for the success of PROFIBUS and PROFINET," he said.

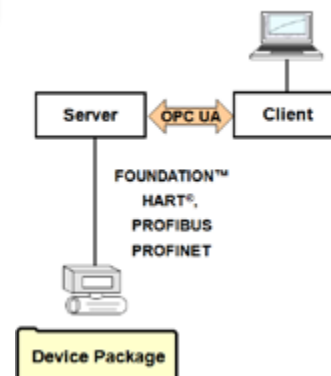
A full report with more pictures can be found on **PAGE 4**.



FDI PROJECT ACHIEVES DEVELOPMENT MILESTONES

The Steering Committee of the Electronic Device Description Language (EDDL) Cooperation Team (ECT) has announced that its technical team has passed important milestones in the effort to develop a common solution for field device integration (FDI).

System Architecture



The FDI project team has been working for the past 18 months to identify use cases encompassing all facets of plant operations, from start up and commissioning to ongoing maintenance activities ...

Continued on Page 2

PI SUPPORTS PROLIST

PI is giving its support to **PROLIST INTERNATIONAL**, an emerging, independent organization of automation users and vendors aiming to develop standardized feature lists of products and systems to enable more efficient planning, design, service and procurement of electrical and process control devices and systems.

PI is providing PROLIST INTERNATIONAL with parts of the PROFIBUS specifications for their feature lists, which will be published in the NAMUR recommendation NE 100 as well as for IEC standardization activities to harmonize with the



eCI@ss System. The basis for this is the electronic data exchange between manufacturers and users and is intended to prevent typographical errors and to reduce the quantity of documentation.

The collaboration with PROLIST will result in a standardized mapping of PROFIBUS interface properties.

PROLIST INTERNATIONAL is a project group of NAMUR.



PI News

FDI PROJECT ACHIEVES DEVELOPMENT MILESTONES

Continued from Page 1

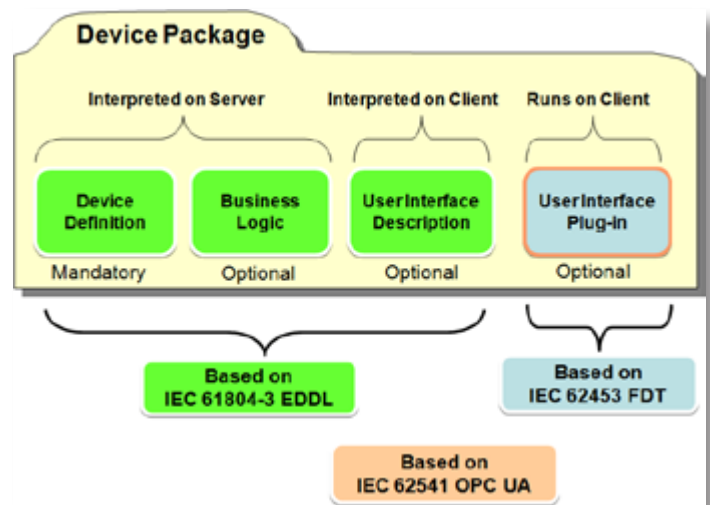
... and plant operations. A key outcome of this work is a draft architecture that will enable Field Device Tool (FDT) and EDDL technologies to be migrated to a common device integration platform and standard.

The success of the FDI project is the result of close cooperation between the ECT and key global process control suppliers including ABB, Emerson, Endress+Hauser,

Honeywell, Invensys, Rockwell Automation, Siemens, Smar and Yokogawa.

Along with the draft architecture, the technical team has performed a complete inventory of use cases and written a draft functional specification. The solution is a client/server structure based on the OPC's Unified Architecture (OPC UA) technology. The FDI solution contains two elements: a 'Device Package' provided by the device supplier and containing EDDL components, and an optional programmed application for customized user interfaces.

This design permits complete flexibility for users to develop customized user interfaces to



meet individual needs.

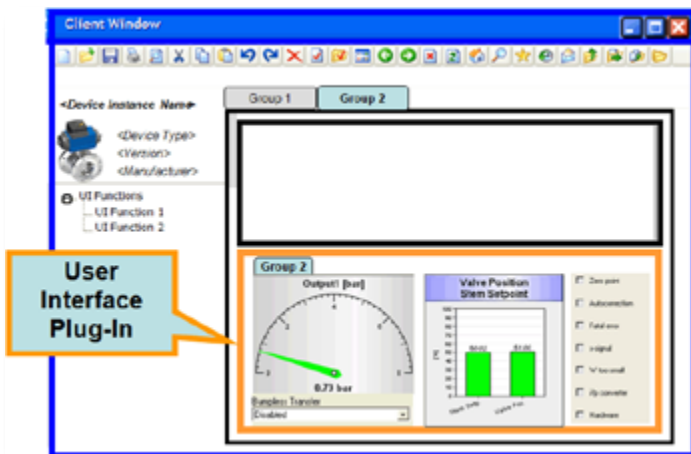
The next milestone of the project is the development of detailed specifications of the FDI solution. The specifications will then be validated by each of the member organizations.

Details of the exact FDI architecture and associated device interface will be unveiled with the release of the final functional specification, currently planned for the summer of 2010.

More about ECT (EDDL Cooperation Team): In 2003, Fieldbus Foundation, HART Communication Foundation and PI represented by PROFIBUS

Nutzerorganisation signed a cooperative agreement to develop a common specification for graphical visualization and persistent data storage enabled by EDDL. All three of the organizations utilize EDDL for parameterization and device descriptions. In 2004, the OPC Foundation joined the ECT. With EDDL, an established IEC standard (61804-3), it made sense for the OPC Foundation to base their data structure on that same standard and work with the organizations to develop a standard interface to OPC UA. The four organizations signed an agreement in 2004 to cooperate in the development of that interface. In 2007, the FDT Group joined the ECT on the basis of a technical agreement to jointly develop a new common standard for device integration. The Steering Committee comprises the presidents of each foundation plus one representative from each organization's membership. Hans-Georg Kumpfmüller is Chairman of the committee.

Taken from a press release issued jointly by: Fieldbus Foundation; PROFIBUS Nutzerorganisation; HART Communication Foundation; OPC Foundation; FDT



Member News

12 ENGINEERS CERTIFIED ...

Twelve new PROFIBUS PA Engineers have been certified



in Kuala Lumpur and Shanghai by Endress+Hauser! The Company, a PI Training Center, was on the road again in May and June, this time with the 'no holds barred' Certified PROFIBUS PA Engineer course. The next

Certified PROFIBUS PA Engineer courses are in 'exotic' Reinach, Switzerland! For more information, contact michael.ulrich@solutions.endress.com or check out the list of Endress+Hauser worldwide PROFIBUS courses [HERE](#).

... PLUS 9 MORE

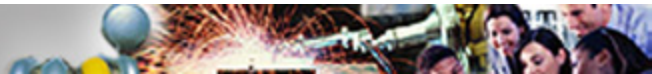
Nine Engineers from Emerson Process Management in Shanghai have become Certified PROFIBUS Engineers.

Said Dennis van Booma, MD of

training company PROCENTEC: "It is a milestone for Emerson to join the PROFIBUS family and they invited me to train the engineers personally, which was a great honor." Dennis says he discussed detailed design specifications for upcoming projects. Emerson's DeltaV and Ovation control systems are both equipped with PROFIBUS DP masters for applications in oil/gas and power/water.

PROCENTEC
or dbooma@procentec.com





Product News

FIBER OPTIC PROFINET INTERFACE



Since the release of the Fast Start Up version of the netX chip, says Hilscher, the automotive industry is now requesting a Fiber Optic interface. Hence netIC, a tiny serial to PROFINET Interface in the DIL32 form factor. It connects any Device with RS232-, SPI- or I2C-Interface directly to the proposed Transceiver AFBR-5978Z from Avago Technologies, including its diagnostic lines. The LVPECL driver and all other active components are on the module. For fast prototyping an Evaluation Board together with a schematic are available. **HILSCHER** or +49 6190 9907-90.

PUMP INTERFACES

GRUNDFOS offers two new pump communication interfaces for use with PROFIBUS DP. CIM 150 is an add-on module installed internally for 11-22 kW E-pumps while CIU 150 has an internal power supply and is for use with other Grundfos devices. They make

standardized data exchange possible between Grundfos pump systems and a PLC or SCADA system. No programming is needed as GSD files and support for the 'Intelligent pump' profile from PI are integrated. **GRUNDFOS** or **infoservice@grundfos.de** or +49 211 92969 0.



PROFINET SAFETY GATEWAY



Bihl+Wiedemann now offers the AS-i 3.0 PROFINET Gateway with integrated Safety Monitor. It combines the advantages of an AS-i 3.0 Gateway and an AS-i Safety Monitor in one housing. Using this combination saves initial costs, installation expenses and control cabinet space. The user can take advantage of expanded AS-i diagnostics including duplicate

address recognition, short circuit and EMC monitoring that exceeds the standard. Up to 16 OSSDs are provided which offer expanded programming and support of safety outputs without requiring a separate AS-i address for diagnosing the Safety Monitor. **BIHL+WIEDEMANN** or +49 0621 33996-0 or **creinecke@bihl-wiedemann.de**.

MODBUS TCP/IP GATEWAY

ProSoft Technology has a new Modbus TCP/IP to PROFIBUS DP-V1 SE Gateway designed to better support and more easily integrate with Modicon M340 processors. The gateway offers Application Communication

Logic (ACL), a feature which automatically generates Derived Function Blocks (DFBs) specific to the application containing all logic required by the processor to manage cyclic and acyclic communications. Acyclic pass-through allows processor-to-slave messaging without additional programming, reducing engineering demands and time-to-deployment while creating a more tightly integrated and secure network infrastructure. **PROSOFT TECHNOLOGY**.



Applications

CZECHIA / WASTE WATER:

Endress&Hauser has completed a project involving an automatic control system for waste water neutralization. The whole project from design to commissioning took less than six months.

Acidic waste water is pumped from tank cars into input tanks and from there transported to tanks where the neutralization is performed using lime milk. The dosage of lime milk is controlled by the pH value of the waste water. The neutralized water is then pumped from the tanks into a filter press where solid substances are separated.

The neutralization control system is based on the ControlCare system solution

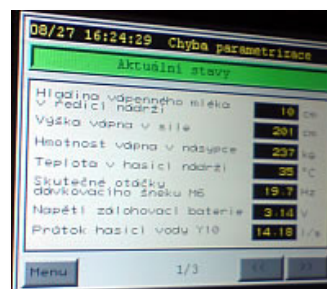


from Endress&Hauser and is based on PROFIBUS DP and PA. PROFIBUS was chosen particularly for its simple system management and for the savings that can be made on cabling.

Measured values of levels, pHs, pressures, temperatures and flows are transmitted to the system by PROFIBUS PA, which is converted to PROFIBUS DP through a segment coupler.

The low power consumption of the instruments enabled the use of only one PROFIBUS PA bus segment.

PROFIBUS PA was designed for hazardous area use and also for powering instruments over the bus. **ENDRESS+HAUSER**



INTRODUCING THE 'SLOT PLC'

Hilscher has announced what they call the 'slot PLC'. Known as netPLC and based on their netX chip it combines the CoDeSys soft PLC with PROFIBUS or Ethernet communications in a single slot PCI card. Hilscher says: "it's the first ready-to-use PLC platform combining the advantages of a soft and a hard PLC into one autonomously operating hardware platform." Release is Q3. All software components are included and there is ample memory for mid and high range applications. USB and parallel ports are used for configuration and maintenance. The card is externally powered so is unaffected by PC stops or resets. Key I/O registers are backed up with a battery and a microSD card slot enables projects to be saved. **HILSCHER** or **abeck@hilscher.com**





PI World

'SHARE OUR VISION FOR AUTOMATION'

The 21st annual meeting of the Regional PI Associations (RPAs) took place in the southern Polish city of Krakow in July.

The five-day meeting brought together 28 RPA Chairmen and staff from 21 RPAs, plus representatives of PI Competence Centers, Training Centers and Test Labs around the world. This 'conjunction of the stars' resulted in the largest attendance at a PI meeting for many years.

PI Chairman Jörg Freitag (below) commented on the scale and breadth of the PI community as evidenced by the number of members present. "Our strong community is the major reason for



PI Chairman Jörg Freitag announced that 1.6 million PROFINET nodes had been sold by the end of 2009. He also announced a new Energy Management profile called PROFInergy.

the success of PROFIBUS and PROFINET," he said. He reported that 1.6 million PROFINET nodes had been sold by the end of 2008. PROFIBUS, celebrating its 20th anniversary this year, is expected to pass the 50 million mark by 2012, he added.



Dileep Miskin reported that interest in PROFIBUS and PROFINET is "huge" in India and that some big companies are involved in establishing an RPA there. A PI Competence Center is already up and running and training is being delivered.

A roundup of reports by RPA Chairmen included a presentation by Dileep Miskin (above) from the UL Group in Pune, India, who said that interest in PROFIBUS and PROFINET was "huge" and that around 20 companies had expressed their intent to join a local association. Steps were being taken to establish an RPA now, he said. He also said that Product Developer



Dariusz Germanek, Chairman of the Polish RPA, hosted the meeting. His association is celebrating its 5th anniversary this year.

Training workshops had taken place in March and that a Competence Center is being set up. Reports were also made by Czechia, Denmark and Italy. There was also a summary of global activities related to the 20th anniversary celebrations of PROFIBUS.

Dariusz Germanek (above, center) Chairman of host country Poland provided excellent hospitality during the week, including visits to a salt mine (!) and walks around the old parts of Krakow. He said that his RPA is celebrating its 5th anniversary in 2009 and that cooperation with universities is one of the most important activities in Poland. Later,

Max Felser from Switzerland (pictured right) underlined this by presenting proposals for supporting universities in better ways. He said that most of the material needed already existed and that these could be easily made available to teachers and lecturers via the web site. It was decided to create a kind of virtual 'PROFIBUS / PROFINET University' at www.profibus.com.



Max Felser from Switzerland proposed ways to support universities better.

A workshop review of the new web site threw up a wide range of suggestions which will now be prioritized and implemented. The slogan 'Share our Vision for

Automation' was adopted for future PI marketing activities.

On Day 3, a combined RPA/Technical meeting took place during which topics such as PROFInergy and the latest

Profile 3.02 for PROFIBUS PA were discussed in greater detail.

The strategic international collaborations that are a key part of PI's activities also received attention. As well as the ECT/FDI and PROLIST projects (see page 2) Jörg Freitag presented PI's aims for wireless communication and the progress made by the Wireless Cooperation Team consisting of PI, Foundation Fieldbus and the HART Communication Foundation. Freitag also reported on the status of the IO-LINK project and its goals, and gave details of the new initiative to develop an Energy Management profile for the active optimization of power usage in high energy devices such as laser equipment, welders and robotic systems.

PROFI people

Two new faces at the PI Support Center (PISC) in Karlsruhe were introduced - Tina-Maren Weith (right, left) and Kathrin Holzer. A special visitor was Rodrigo Pinto Cárdenas from Chile, (below right) who attended a PI meeting for the first time. Cárdenas runs the PI Competence Center in Chile. A new PICC was accredited at the Cologne University of Applied Sciences. Our picture below shows Terezia Toth and Juergen Welter (itm Munich, the first auditors), Max Felser, (BUAS and PICC chair



and the second auditor), and Sabina Hein and Prof. Dr. Frithjof Klasen from the new PICC.



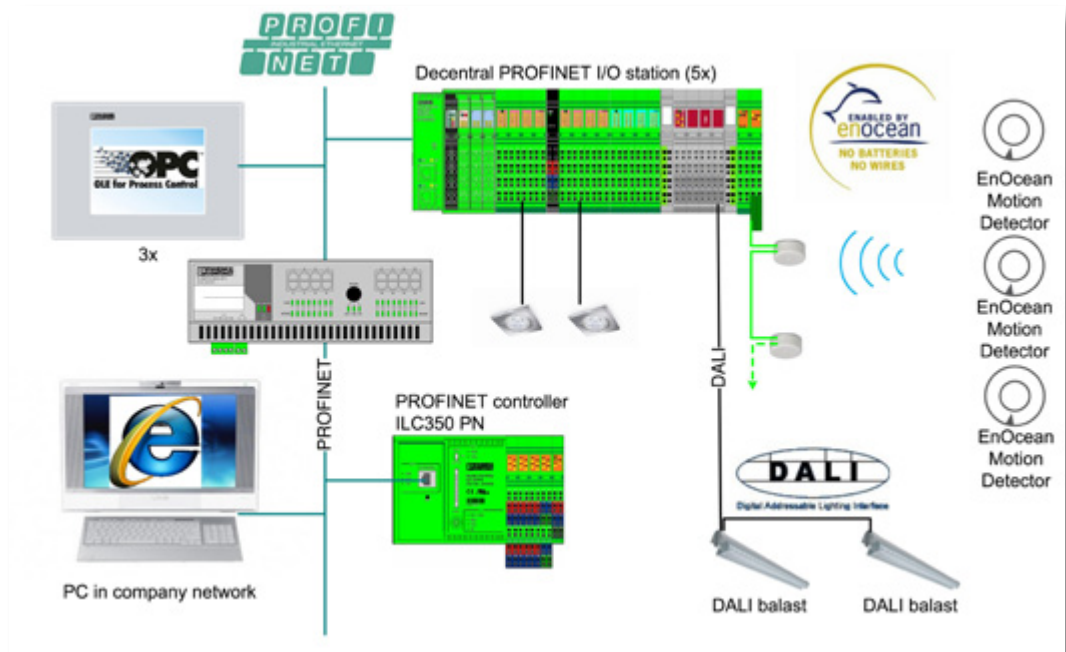


Applications

BELGIUM / LIGHTING

SYSTEMS: A lighting system controlled by movement detectors saves energy. But with the combined Phoenix Contact EnOcean/DALI (Digital Addressable Lighting Interface)/PROFINET system, the Belgian wholesaler Breva has also demonstrated that contemporary lighting concepts score well in terms of flexibility and modular design.

Breva moved its head office in April 2008 to a spacious new building. The lighting there consists of three building blocks: wireless modules based on EnOcean technology; gradual operation of the light with DALI elements; and PROFINET communications. Phoenix Contact is the only supplier able to combine these technologies in one solution.



The five decentralized I/O stations are connected in a star structure via PROFINET and an Ethernet switch to which a central PLC is also connected via PROFINET. This PLC, a Phoenix Contact ILC 350 PN, processes the data from the movement reporters

station by means of a data cable.

Web based operation

In some rooms the lighting is operated using control panels. Various touch screens are linked to the Ethernet data network and they exchange data with the PLC via OPC. The whole lighting system can also be operated from a web page in the PLC. The lighting of the entire head office can thus be controlled from any PC that has access to the network.

Various advantages

Breva employees don't have to

think long when asked about the benefits. "The flexibility and modular design are fantastic," they say. "You can develop and adapt the system as you wish - for example, you can connect the whole system to an electronic scheduler, or to an Excel file. The system also grows with the building and your needs." Installation of the system is quick and easy as fewer cables are involved than in a traditional lighting concept and of course there are those energy saving advantages too.

PHOENIX CONTACT.



Efficient light control

The office building was first split into five zones. In each of these a distribution board with a decentralized PROFINET I/O station was installed. Inputs come from about 110 'movement reporters', which detect whether there is someone in the room and send a wireless signal to a receiver fitted above the false ceiling using a license-free frequency.

and operates the lighting area accordingly.

Reduced cabling

The gradual operation of the light fittings occurs by means of DALI. To this end the fittings contain a DALI module which communicates with the DALI module in the decentralized PROFINET I/O station. The DALI fittings are connected in series to the I/O





PI World

UK

The 'Practical Aspects of PROFIBUS in Process' course travels to Scotland in October and there are free places to be claimed! The seminar addresses practical issues arising from the use of fieldbus communications. admin@uk.profibus.com



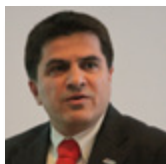
uk.profibus.com. Meanwhile a call for papers has been issued for the 2010 Conference which will contain a mixture of presentations, demonstrations and hands-on practical sessions. The focus will be on the user community. Proposals should be sent to The Papers Committee at uk@profibus.com no later than 30th November 2009.

NORTH AMERICA

PTO's annual General Assembly Meeting (GAM) was postponed this year in deference to the economic situation. But it took place anyway - on the web! The one-hour virtual meeting included status reports and a look ahead to 2010. About 40 member companies joined the meeting and listened to reports about PTO's highly successful range of marketing projects, which reached nearly 500,000 people in 2008. Members also heard that there are now 620 Certified PROFIBUS Engineers in North America. Afterwards many emails were received congratulating PTO on the event. In accordance with PTO tradition a (virtual) pool party was held during which a cake celebrating PTO's 15th birthday was cut. [VIDEO HERE](#). We're told that online Margaritas were on offer too! [READ THE PTO REPORT](#). usa@profibus.com

INDIA

The first ever one-day PROFIBUS Product Developer Training workshops in India took place in Pune in March, organized by the UL Group. Presenters included Dileep



Miskin (above), who is head of the PROFIBUS center at UL Group. Dileep said that he expects a rash of new PROFIBUS products to emerge from India soon. UL Group is now setting up the first PI Competence Center in India. india@profibus.com

JAPAN

Japanese PROFIBUS Organization (JPO) held its annual roadshow 'PROFIBUS Day 2009' in Tokyo, Osaka and Kita-kyushu during July. There were over 220 participants. 16



members provided products and JPO made multi-vendor demonstration systems for both PROFIBUS and PROFINET. One of the most interesting demonstrations was the configuration of a PROFIBUS system in front of participants, which made delegates understand how easy and efficient PROFIBUS engineering is. This is the fourth year of the 'PROFIBUS Day'. This year there were more users than in the last three events. Because some participants asked about more technical matters, JPO plans to hold further technology seminars during the fall. japan@profibus.com

AUSTRALIA

RPA Australia has established its first PICC at Tyco Flow Control, which is



now offering training and support on the eastern side of Australia. Andy Verwer from the UK recently completed a successful training trip in the west. There are now over 80 certified PROFIBUS Engineers in Australia. To commemorate the 20th anniversary of PROFIBUS, a series of one-day 'Technical Forums' has been arranged, including presentations on PROFIBUS technology, installation, troubleshooting and user experiences. Events have been held in Newcastle (just outside Sydney) and in Sydney. In September,

Brisbane and Perth are on the itinerary. Events are open to all RPA members. australia@profibus.com

BRAZIL

More than 40 professionals from RPA member companies participated in a special sales training class promoted by Brazil Latin America in July. Held in São Paulo, the goal was to train sales personnel in PROFIBUS DP, PROFIBUS PA, Drivers, Profiles and AS-i technologies. Special emphasis was given to providing key sales technical arguments.



Participants listened to presentations from Cesar Cassiolato, President of the RPA (above right), Leandro Torres (left), Director of PROFIBUS

PA Technology (both from SMAR), and Carlos Fernando from Siemens (right). One of the most interesting aspects of the class was the expectation of customers in relation to the market. Presenters pointed out that PROFIBUS has been used in many applications around the world for more than 20 years, with



approximately 30 million installed nodes today. It is a proven technology that nevertheless continues to evolve, and it has provided many benefits in a huge range of applications. Another class will be held within the next 12 months. Training like this, says Cassiolato, not only delivers important technical updates but is also a valuable help in integrating the membership of RPA Brazil Latin America.

cesarcass@smar.com.br

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